

## **SHOWCASE EUROPE GUIDE 2001**

### **FRANCE**

#### **I. Introduction and Brief Overview**

The market for environmental technologies (ET) in France is generally favorable, largely due to greater public and government interest in dealing with growing threats to environmental challenges. On May 3, 2001, Jacques Chirac, President of France delivered a message to the French public emphasizing the importance of preservation of the environment, pollution reduction and natural resource conservation. In his speech, President Chirac asked the French people to join an effort to make France a cleaner and healthier place while still allowing business and the economy to flourish. He went on further to say that one of the greatest areas of economic expansion lies in the environmental technologies industry.

In addition, the French Ministry of the Environment, headed by Dominique Voynet, a member of the Green Party, has placed a high priority on environmental affairs and sustainable development. To demonstrate its commitment, the Ministry's budget for environmental activities is estimated at USD 644 million (FF 4.70 billion), which represents a 9.2 percent increase over the budget for 2000. This budget will allow the Ministry to pursue an extensive and ambitious program.

Strong emphasis will be placed on resource recovery, selective collection and recycling, in efforts to reduce solid and municipal waste at the source. The Ministry has also allocated funds for the implementation of a newly created agency, the French Health and Environmental Safety Agency (*Agence Française de Sécurité Sanitaire Environnementale*). This organization will be charged with studying the effects the environment has on health and safety and developing appropriate solutions. The French Coastline Conservatory (*Le Conservatoire du Littoral*) has also been given greater importance in its mission to protect and maintain the Atlantic and Mediterranean coastal regions. In particular, large resources will be mobilized to remediate lands formerly owned by the Ministry of Defense.

The Ministry has also received significant pressure from the European Union (EU) to clean up the environment in France, through stricter regulations. France's "clean air act" will continue to lower emission levels, while new water laws will raise water quality standards.

Using fiscal policy to promote environmental control objectives, the French government plans to expand the highly contested "global tax on polluting activities" (*Taxe Générale sur les Activités Polluantes - TGAP*). This tax now covers detergents, softeners, as well as industrial energy consumption. It has thus become a comprehensive pollution tax. This tax policy was designed to compel industries to invest in less polluting technologies while promoting job creation.

## II. Market Size

The market for environmental technologies in France has been relatively stable in recent years.

	1999	2000*	2001*
A. Total Market Size:	24,151	20,531	21,138
B. Total Local Production:	27,136	22,290	22,950
C. Total Exports:	7,828	6,688	6,750
D. Total Imports:	5,155	4,738	4,938
E. Imports from U.S.:	618	620	621
F. Exchange Rate: USD 1.00	FRF 6.15	FRF 7.12	FRF 7.29

(US millions of dollars)

(\*) Estimated figures.

## III. Market Analysis

The total French market for environmental technologies is estimated to be worth USD 21 billion (FF 154 billion). In 2000, the overall market grew by approximately 5 percent, while in 2001, the market is expected to grow by 5.7 percent. Although the market has grown over the last 4 years and is expected to continue to grow, total value in dollar terms has decreased due to a 22 percent strengthening of the U.S. dollar relative to the French

France since 1999. In any case, forecasts for the French environmental technologies market remain optimistic.

Investment in solid waste management and water treatment facilities, equipment and services are of primary importance to French regional governments, as well as to municipalities. Replacement of leaded pipes with unleaded ones, as well as the construction of sewage treatment plants for rural areas represent major business opportunities in France. The shift from current solid waste treatment to higher operating-cost systems, (i.e. from treating unfiltered waste to selective collection and recycling of waste and from landfill use to incineration) will also drive market demand upward. Furthermore, economic recovery, low interest rates, changing and sounder financial practices, and conformity to EU regulations will most likely contribute to a more favorable business climate in France. As a result, there should be greater demand for environmental products and services in France.

#### **A) Air Pollution Control**

The air pollution control market in France is one of the more dynamic markets within the ET industry. It is currently worth approximately USD 600 million. The market has grown nearly seven percent in recent years and is expected to offer continued favorable business opportunities. The principal forces driving this market expansion include stricter European directives that will require monitoring 13 new pollutants (such as carbon monoxide, benzene, PAH – Polycyclical Aromatic Hydrocarbons, and heavy metals). The directives will also require a reduction in the emission levels of several gasses and other pollutants.

Private industry, including manufacturing firms and incineration plants, will be strongly affected by current and future European legislation and regulation. Most of these plants are currently investing heavily in pollution control equipment and services in order to comply with existing European emission regulations. Additional outlays will also be required to comply with the new regulations. To a large extent, many industrial sectors are not sufficiently equipped to respond to these emission control regulations and are reluctantly making the necessary investments, or are not doing so. In any case, it is quite clear that all French companies will eventually incur

heavy expenditures to be in compliance with EU directives requiring higher environmental standards.

The construction of new incinerators and the equipping of existing plants to comply with regulations will continue to stimulate the market. In particular, future directives for treatment of furans and dioxins are expected to promote market growth over the next several years. Furthermore, a shift from landfill to incineration to treat solid waste will increase the number of operators as well as the amount of waste being incinerated.

The market for de-dusters, gas scrubbers and gas purification systems in France is among the fastest growing in the air pollution control industry. Ten percent growth for 2001 is expected, after two years of double-digit growth -- 14 percent in 1999 and 10 percent in 2000.

The market for air and gas ambient monitoring and measuring instruments, which is tied to municipal procurements and national government subsidies, decreased over the past several years and is expected to grow only modestly in 2001. At the same time, the market for emission source analyzers, which is dependent upon both private and public sector clients, should benefit from a greater adherence to ISO 14000 and stricter European norms reducing VOC (volatile organic compounds) and dioxin emissions. As such, the instrumentation market should continue to grow in 2001.

## **B) Water/Wastewater Treatment**

Over the last several years, the French water treatment industry has seen enormous consolidation. France's two largest water treatment companies, Vivendi and Suez Lyonnaise des Eaux, are now major stakeholders in the American water industry, having now acquired US Filter and Calgon/Nalco, respectively. The third largest player in the French market, Saur, a subsidiary of Bouygues, has also sought alliances to compete with Vivendi and Suez Lyonnaise des Eaux. Combined, these three companies control approximately 80 percent of potable water treatment and distribution and nearly 55 percent of the wastewater treatment market in France. Those water treatment plants not managed by the three major French companies are generally operated by municipalities or "special district" agencies.

Consequently, any company wanting to do business in France will probably have to work directly or indirectly with one of these companies.

The French water treatment market is expected to show strong signs of growth over the next several years. European legislation has created high standards for water treatment, which will entail considerable investment, construction and upgrading. A 1991 European Union directive and the French "law on water" require that water treatment systems be established throughout all of France by 2005. Cities with more than 15,000 inhabitants will have to be equipped with sewage plants by 2001 while cities with a population of 2000 to 15,000 will have until 2006. This EU directive is expected to offer a growing market for the next 10 years.

Furthermore, in 1998 the EU adopted directives to modernize twenty-year-old drinking water standards. These measures, which will become French law in 2001, include setting microbial and chemical specifications as well as establishing conditions for facility operations and distribution regulations. This legislation is expected to increase demand for equipment and materials that help meet these requirements. Processing of aromatic hydrocarbons alone is expected to increase costs by nearly USD 150 million (FF 1 billion).

Finally, as the costs to comply with these measures become greater, the privatization of municipal water treatment services will become inevitable and should provide greater opportunities for small and medium-sized firms providing such services. Another issue that should affect the industry in the near future is sludge treatment. The current debate is centered around incineration, resource recovery, composting and manure spreading. All approaches have been considered valid and may offer unique business opportunities.

The French National Water Agency (*L'Agence de l'Eau*) is responsible for managing France's water resources. The Agency conducts water treatment studies, formulates water policy and acts as a financial institution offering grants and low interest loans to various municipal and non-government organizations to improve water resource management and water treatment technology. The Agency is financed by taxing water consumption and uses the revenue to carry out five-year policy plans. The 1997-2001 five-year budget is approximately USD 15 billion (FF 105 billion), and represents a 15

percent increase over the previous budget. The plan has focused on equipping small rural cities (less than 2000 inhabitants) with water treatment facilities, including construction of new plants and their maintenance. It is believed that the 2002-2006 plan will include funding for flood prevention and management and non-point source pollution.

### **C) Waste Management and Contaminated Soil Remediation**

The French urban waste management market is valued at approximately USD 4 billion and is expected to remain stable. Over the past several years the industry has become highly privatized. Nearly 60 percent of waste collection and 92 percent of waste treatment are conducted by the private sector. The two major stakeholders in this market are Vivendi and Suez Lyonnaise des Eaux.

In recent years, the industrial waste market has experienced a slowdown due to an interruption in the development of waste incineration activities. However, this market has recently shown signs of recovery due to increased economic growth in France, increased demand in the incineration sector, and continued improvements in collection, containment and disposal processing.

Both legislation and public interest groups have put pressure on the industry to move progressively towards increased sorting, recycling, reclamation and resource recovery. In addition, newly established directives will restrict the use of landfills for inert waste, thus creating a need for increased recycling and incineration capacities. The industry is also placing greater emphasis on biological degradation in an effort to develop more ecologically sound waste treatment processes.

While some EU legislation has created new market opportunities, it has also had negative repercussions on traditional markets. The 1998, the French Government announced the enlarging of the definition of final waste products and the placing of a greater emphasis on recycling, which had a crippling effect on the construction of household waste incinerators. The market for those products dipped 33 percent in 1998, as many contracts were either postponed or cancelled. Although 2000 witnessed an increase in growth by 80 percent, taking into consideration postponed, cancelled or

newly scheduled projects, the market is expected to continue to decline in 2001.

Two recent important developments in the waste management industry were the merger of the Alstom and ABB groups and the founding of the German company Babcock Borsig Power in the energy sector.

In the recycling industry, the price of raw materials dropped significantly, principally in the metals and plastics sectors, thereby reducing margins for recycling companies. Although this market has seen a significant decline in the recent past, the forecast for 2001 shows a healthy 10 percent expansion.

The contaminated soil remediation market, estimated at USD 60 million (FF 440 million), experienced modest growth in 1999, as a result of an increase in the number of projects - albeit smaller in size than years past. However, this market is expected to remain relatively stable over the next year as the Ministry of Environment has not committed to an increase in funding to clean up polluted public and abandoned land sites. Nevertheless, government financing of soil remediation projects is expected to start up again in the near future. Furthermore, the Erika oil spill (December 1999) clean up should also continue to contribute to stimulating the market.

The market has seen a shift in service providers. Historically, companies that are members of the Soil Remediation Trade Association, (*Union des professionnels de la décontamination des sites - UPDS*) have represented approximately 80 percent of market share. However, recently companies known for their public works expertise have successfully entered the market. Brézillon, a subsidiary of Bougyues' land development company was awarded the contract for the Erika oil spill clean up. Similarly, the remediation contract for the contaminated Novartis site at Vernoula-Celle was issued to the company Colas Environnement et Recyclage.

#### **IV. Market Opportunities for U.S. Firms**

- Due to stricter EU directives on emissions and air pollution control equipment, de-dusters, gas scrubbers and gas purification systems represent some of the best market opportunities for U.S. firms.

- In order to comply with EU directives, France will have to construct major water distribution and wastewater treatment facilities covering all of France. In most cases, all of France's regions will have to comply by 2006. This EU directive is expected to help stimulate a growing market over the next few years. As a result, the market is currently shifting to the development of small and medium-sized wastewater and sewage plants, capable of servicing communities of 10,000 inhabitants and is expected to offer some of the greatest opportunities in the near future. However, due to the enormous outlays involved, many regions will be granted additional time to meet these higher standards. Although the three major water treatment companies in France are extremely competitive, they have not cornered the market in innovative and cost-saving industrial wastewater treatment technologies.
- Currently there are nearly 4 million septic and stand-alone sewage treatment tanks in France. Very few of these units comply with current or future environmental regulations. They will, therefore, need to be replaced or revamped. Approximately 200,000 more units are expected to be installed by 2005. Managing and maintaining these installations has become a top priority for end-users. However, very few qualified companies are capable of providing this service.
- Other promising markets in France for U.S. companies include waste-to-energy incineration plants and technologies, as well as certification of company environmental practices (ISO 14000 or EMAS [Environmental Management and Audit System]); and "clean car" technologies (electric vehicle technology).

## **V. Major Projects**

Most decision-making authority and management of major projects takes place at the region and department level (French political/administrative units to which the national government delegates most of the decision making for implementation of environmental laws). Such authority and management responsibility do not lie at the national level. Each region has



its own particular programs for construction of waste management facilities. As for water management and distribution, projects are initiated by France's six *Agences de l'Eau* or water authorities, and are then delegated to the specific regional, departmental or municipal government to manage.

Nearly USD 200 million have been allocated for the construction and management of water treatment plants in rural areas throughout France, including rainwater treatment. The market is currently shifting to the development of small and medium-sized wastewater and sewage plants capable of servicing communities of 10,000 inhabitants and is expected to offer some of the greatest opportunities in the near future.

The French National Water Agency has targeted remediation of Western Europe's largest ground water aquifer, located in France, as a top priority. This aquifer has been polluted with nitrates and organic micro-pollutants generated by agriculture activity.

In December 1999, France suffered two of the greatest environmental disasters ever recorded in French history -- major wind storms and the Erika oil spill. Individually, both had severe consequences. By taking place almost simultaneously, they impacted greatly on the overall natural environmental balance in France. As a result, the Ministry of the Environment has created a special fund of USD 644 million or 700 million Euros for the clean up and repairs needed due to the damage caused by the Erika oil spill and storms in December 1999.

## **VI. Major Contacts in Environmental Areas**

The Commercial Service

American Embassy

2, Avenue Gabriel

75382, Paris Cédex 08

Tel: (33) (1) 43.12.22.22

Fax: (33) (1) 43.12.21.72

Senior Commercial Officer: Kenneth P. Moorefield

Commercial Specialist: Everett G. Wakai

Ministère de l'Environnement / Ministry of the Environment

20 avenue de Ségur  
75302 Paris Cédex 07SP  
Tel: (33) (1) 42.19.20.21  
Fax: (33) (1) 42.19.11.23  
[www.environnement.gouv.fr](http://www.environnement.gouv.fr)

Ministry of the Environment (air pollution section)  
20 avenue de Ségur  
75302 Paris Cédex 07SP  
Tel: (33) (1) 42.19.14.04  
Fax: (33) (1) 42.19.14.71

Ministry of the Environment (water treatment section)  
20 avenue de Ségur  
75302 Paris Cédex 07SP  
Tel: (33) (1) 42.19.13.26  
Fax: (33) (1) 42.19.13.13

Center for Information, Research and Experimentation on Accidental Water  
Pollution  
CEDRE  
Centre de documentation, de recherche et d'expérimentation  
sur les pollutions accidentelles des eaux  
Rue Alain Colas BP 20413  
29604 Brest  
Tel: (33) (2) 98.33.10.10  
Fax: (33) (2) 98.44.91.38  
[www.ifremer.fr/cedre](http://www.ifremer.fr/cedre)

Regional Administration of Industry, Research and the Environment  
DRI RE  
Direction Régionale de l'Industrie  
de la Recherche, et de l'Environnement  
10 rue Crillon  
75004 Paris  
Tel: (33) (1) 44.59.47.47  
Fax: (33) (1) 44.59.47.56  
[www.drire-ile-de-france.fr](http://www.drire-ile-de-france.fr)

Agency for Environment and Energy Control

ADEME

Agence de l'Environnement  
et de la Maîtrise de l'Energie

27 rue Louis Vicat

75015 Paris

Tel: (33) (1) 47.65.20.00

Fax: (33) (1) 46.38.52.36

[www.ademe.fr](http://www.ademe.fr)

French Institute for the Environment

IFEN (Institut Français de l'Environnement)

61 boulevard Alexandre Martin

45058 Orléans Cédex

Tel: (33) (2) 38.79.78.78

Fax: (33) (2) 38.79.78.70

[www.ifen.fr](http://www.ifen.fr)

National Institute for the Environment and Industrial Risks

INERIS

Institut National de l'Environnement Industriel  
et des Risques Industriels

Testing Institute/Laboratories

Parc technologique ALATA

BP 2

60550 Vermeuil en Halatte

Tel: (33) (3) 44.55.66.77

Fax: (33) (3) 44.55.66.99

[www.ineris.fr](http://www.ineris.fr)

National Testing Laboratory

LNE

Laboratoire National d'Essais

Zone Artisanale Trappes-Elancourt

5 avenue Enrico Fermi

78190 Trappes

Tel: (33) (1) 30.69.10.00

Fax: (33) (1) 30.69.12.34

[www.lne.fr](http://www.lne.fr), [info@lne.fr](mailto:info@lne.fr)

Ministry of Industry - Authority for Nuclear Safety  
ASN

Ministère de l'industrie/ Autorité de Sûreté Nucléaire

99 rue de Grenelle

75353 Paris cédex 07

Tel: (33) (1) 43.19.32.17

Fax: (33) (1) 43.19.39.24

[www.asn.gouv.fr](http://www.asn.gouv.fr)

Office of Protection against Radioactivity

OPRI

Office de protection contre les rayonnements ionisants

31 rue de l'Ecluse

78110 Le Vésinet

Tel: (33) (1) 30.15.52.00

Fax: (33) (1) 39.76.08.96

[www.opri.fr](http://www.opri.fr) / [opri@opri.fr](mailto:opri@opri.fr)

National Association of Waste and Environmental Industries

FNADE

Fédération Nationale des Activités du Déchet de l'Environnement

33 rue de Naples

75008 Paris

Tel: (33) (1) 53.04.32.90

Fax: (33) (1) 53.04.32.99

[Fnade@fnade.com](mailto:Fnade@fnade.com) / site en cours

UNICEM

Union Nationale des Industries de Carrière et de Matériaux

3 rue Alfred Roll

75849 Paris cédex 17

Tel: (33) (1) 44.01.47.01

Fax: (33) (1) 40.54.03.28

[www.unicem.fr](http://www.unicem.fr)

National Association of Waste Collectors and Recyclers

FEDEREC

Fédération Française de la Récupération pour la Gestion Industrielle de  
l'Environnement et du Recyclage

101 rue de Prony

75017 Paris

Tel: (33) (1) 40.54.01.94

Fax: (33) (1) 40.54.77.88

AFITE

Association Française des Techniciens de l'Environnement

French Environmental Technicians Association

9, rue de Rocroi

75010 Paris

Tel: (33) (1) 40.23.04.50

Fax: (33) (1) 40.23.05.39

[www.afite.org](http://www.afite.org), [bureau@afite.org](mailto:bureau@afite.org)

CYCLAMED

Pharmaceutical Packaging Recycling Association

68, boulevard Flandrin

75116 Paris

Tel: (33) (1) 53.70.02.70

Fax: (33) (1) 53.70.88.11

[Cyclamed@wanadoo.fr](mailto:Cyclamed@wanadoo.fr)

REVIPAC

Association of paper producers using recycled paper

6 rue Auguste Bartholdi

75015 Paris

Tel: (33) (1) 45.79.88.99

Fax: (33) (1) 45.79.39.33

[Revipac@wanadoo.fr](mailto:Revipac@wanadoo.fr)

Soil Remediation Trade Association

UPDS

Union des Professionnels de la Décontamination des Sites

7, rue E & A Peugeot

92563 Rueil-Malmaison

Tel: (33) (1) 47.08.73.32  
Fax: (33) (1) 47.08.73.73

#### VALORPLAST

Private company which finances recycling activities (plastics only)

14, rue de la République  
92800 Puteaux

Tel: (33) (1) 46.53.10.95

Fax: (33) (1) 46.53.10.90

[www.valorplast.com](http://www.valorplast.com) / [valorplast@valorplast.com](mailto:valorplast@valorplast.com)

#### VERRE AVENIR

Glass manufacturers association to promote recycling

3, rue de la Boétie  
75008 Paris

Tel: (33) (1) 42.65.60.02

Fax: (33) (1) 42.66.23.88

### **VII. List of Trade Events**

Name: POLLUTEC  
Industry: Pollution Control  
Location: Paris Nord Exhibition Center, Villepinte, Paris, France  
Date: December 4-7, 2001  
Organizer: Reed – Exhibition France  
USA Contact: Virginia Jensen  
Kallman Worldwide, Inc.  
Four North Street  
Waldwick, New Jersey 07463-1842  
Tel: (201) 251-2600  
Fax: (201) 251-2760  
Frequency: Annual

This is France's premier environmental trade show and Europe's second largest exhibition in the sector, covering all facets of environmental technologies. This show is a well-attended international trade exhibition, which grows in size each year. The 1999 exhibition, which was held in Paris, drew over 1,400 exhibitors and 36,000 international visitors. The Commercial Service in France organized an U.S. pavilion in 1999 and provided a series of matchmaking, marketing and promotional services.

The U.S. Pavilion at Pollutec 2001 has been certified by the U.S. Department of Commerce and will be organized by Kallman Worldwide, Inc. Each year, the show alternates between Lyon and Paris, shifting focus from specifically industrial – in Paris – to overall market applications – in Lyon (including municipal buyers). The 2001 show will take place in Paris and target primarily private sector buyers.

Name: ASSISES NATIONALES DES DECHETS  
Location: Parc des Expositions, Agen, France  
Dates: June 27-28, 2001  
Frequency: Annual  
Contact: Reseau IDEAL  
Mr. Christian Advocat  
108, avenue de Fontainebleau  
94276 Le Kremlin-Bicetre Cedex  
France  
Tel: (33-1) 45.15.09.09  
Fax: (33-1) 45.15.09.00

Now in its sixth year, this major conference – national waste convention -- brings together elected officials, city planners, environmental agency representatives, trade association officials, and other interested parties. A series of workshops and conferences are planned on all aspects of urban waste collection and processing, along with a small, but growing number of exhibitors (120 in 2000). This is a highly specialized and targeted event -- for companies selling to local authorities.